



PATENT ABSTRACTS OF JAPAN

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(54) GAS TURBINE

improving performance of the gas turbine.

(57) Abstract:

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PROBLEM TO BE SOLVED: To cool a blade ring with steam, to control a clearance between the tip of a moving blade and the blade ring by adjusting the cooling steam, and to adequately hold the clearance, in relation to a gas turbine.

SOLUTION: Steam from a steam turbine bottoming system 10 flows through a pipe 12 to a blade ring cooling passage 8 of the gas turbine 1 and cools the blade ring. The steam after the cooling is made to flow to a tail cylinder cooling passage 9 of a combustor 3 to cool a tail cylinder and is recovered to the steam turbine bottoming system 10 through a pipe 14. The blade ring is cooled with the steam, thermal expansion of the blade ring is adjusted by adequately adjusting flow, pressure and temperature of the steam for cooling, and the clearance for the tip of the moving blade is controlled to approach to a desired value. Thus, the clearance during operation is minimized, thereby

